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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,072	12/21/2000	Juen-Kuen Lin	200690US2CONT	7469
22850	7590 04/18/2002			
OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC			EXAMINER	
FOURTH FLO		NGUYEN, DUNG V		
1755 JEFFERSON DAVIS HIGHWAY ARLINGTON, VA 22202				
ARLINGTON	, VA 22202		ART UNIT	PAPER NUMBER
			3723	
			DATE MAILED: 04/18/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

			A <sub>1</sub>			
		Application No.	Applicant(s)			
		09/741,072	LIN ET AL.			
	Office Action Summary	Examiner	Art Unit			
	The state the DATE of the commission of	Dung V Nguyen	3723			
۔ Period fo	- The MAILING DATE of this communication ap r Reply	pears on the cover sheet with the c	correspondence address			
THE N - Extense after S - If the p - If NO - Failure - Any re	DRTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a re- period for reply is specified above, the maximum statutory perior e to reply within the set or extended period for reply will, by statu- pply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day it will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed  /s will be considered timely.  In the mailing date of this communication.  ED (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 25	February 2002 .				
2a)⊠	This action is <b>FINAL</b> . 2b) 7	his action is non-final.				
3)	Since this application is in condition for allow closed in accordance with the practice under	vance except for formal matters, p r <i>Ex parte Quayle</i> , 1935 C.D. 11,	rosecution as to the merits is 453 O.G. 213.			
-	on of Claims					
-	Claim(s) 1.4-7 and 11-15 is/are pending in the					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
•—	☐ Claim(s) 1.4-7.11 and 14 is/are allowed.					
•						
-	Claim(s) is/are objected to.  Claim(s) are subject to restriction and	for election requirement				
,	on Papers	or election requirement.				
• •	The specification is objected to by the Examir	ner.				
• —	The drawing(s) filed on is/are: a)□ acc		aminer.			
,,,	Applicant may not request that any objection to					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) 🔲 -	The oath or declaration is objected to by the E	Examiner.				
Priority u	ınder 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
* 5	3. Copies of the certified copies of the pr application from the International B See the attached detailed Office action for a li	Bureau (PCT Rule 17.2(a)).				
	Acknowledgment is made of a claim for dome		•			
а	)  The translation of the foreign language packnowledgment is made of a claim for dome	provisional application has been re	eceived.			
Attachmen						
1) Notice	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s	5) Notice of Informa	rry (PTO-413) Paper No(s) I Patent Application (PTO-152)			

Application/Control Number: 09/741,072

Art Unit: 3723

### **DETAILED ACTION**

#### Terminal Disclaimer

The terminal disclaimer filed on 25 February 2002 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent Number 6,220,930 has been reviewed and is accepted. The terminal disclaimer has been recorded.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 12, 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Numoto et al (USPN 6,203,414). Numoto et al disclose a wafer polishing head 20 for planarizing a wafer 2 comprising a carrier 32 for loading the wafer 2, a wafer adhering layer 34 disposed beneath the carrier 32, a retaining ring 42 surrounding the carrier 32 and the wafer adhering layer 34, comprising a first chamber 70 having a first inner pressure disposed above the retaining ring 42, a second pressure chamber 60 having a second inner pressure disposed on the carrier 32 and an automatic control system coupled to the first pressure chamber 70 and the second pressure chamber 60 for

Application/Control Number: 09/741,072

Art Unit: 3723

adjusting a relative height between the carrier 32 and the retaining ring 42 (note Fig. 1, col. 5, line 21 to col. 6, line 63).

### Allowable Subject Matter

Claims 1, 4-7, 11 and 14 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: prior art of record discloses a wafer polishing head for planarizing a wafer comprising a carrier for loading the wafer, a wafer adhering layer disposed beneath the carrier, a retaining ring surrounding the carrier and the wafer adhering layer, comprising a first chamber having a first inner pressure disposed above the retaining ring, a second pressure chamber having a second inner pressure disposed on the carrier and an automatic control system coupled to the first pressure chamber and the second pressure chamber for adjusting a relative height between the carrier and the retaining ring. Prior art of record fails to disclose or imply a wafer polishing head comprises a converting device for transforming pressures into digital signals, and a controlling device coupled to the converting device for comparing digital signals and producing digital signals, and regulating device coupled to the controlling device for transforming digital signals into pressure values for adjusting fluid pressures in the chambers, as specifically recited by applicant's respective claims.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Application/Control Number: 09/741,072

Art Unit: 3723

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

DVN April 17, 2002 Timothy V. Eley Primary Examine